

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A Mmethod for randomly storing data on at least one of the group consisting of data storage networks, ~~and/or~~ an intranet, ~~and/or the~~ an Internet, characterized in that a quantity of data blocks D_i ($i=1, \dots, m$) is allocated to a quantity of data storage systems S_j ($j=1, \dots, n$) pursuant to the following steps and stored there:
 - a) allocating a virtual storage space ~~is allocated~~ to an overall quantity of data storage systems and at least one partial space I_j of the virtual storage space to each individual data storage system S_j ($j=1, \dots, n$) by an initial random process, whereby the relationship between the partial space I_j and the overall virtual storage space at least approximately matches the relationship of the values of a presetable parameter relating to the data storage system S_j or the overall quantity of data storage systems,
 - b) allocating a (random) element $h(i)$ of the virtual storage space ~~is allocated~~ to each data block D_i ($i=1, \dots, m$) by means of a second random process,
 - c) determining for each data block D_i ($i=1, \dots, m$) at least one partial space I_k containing $h(i)$ ~~is determined~~ and allocating the data block D_i ~~is allocated~~ to at least one of the data storage systems S_k represented by this (these) partial data space(s) I_k and stored there.
2. (Currently amended) The Mmethod according to ~~one of the Cclaims~~ 1, characterized in that with at least one of an initial random process ~~and/or a~~ second random process, pseudo-random functions are applied.
3. (Currently amended) The Mmethod according to ~~one of the Cclaims~~ 1 ~~or~~ 2, characterized in that wherein said data storage systems S_j ~~whose~~ has a value c_j of the presetable parameter that exceeds a second value δ that is also presetable, ~~are is~~ are fragmented into

$\left\lfloor \frac{c_j}{\delta} \right\rfloor$ new virtual data storage systems S_j , ~~wherein with value~~ $c_j = \delta$ and ~~if~~ wherein
~~when~~ $c_j = \left\lfloor \frac{c_j}{\delta} \right\rfloor * \delta \neq 0$, ~~S_i is fragmented~~ into another virtual data storage system S_k
~~wherein with~~ $c_k = c_j - \left\lfloor \frac{c_j}{\delta} \right\rfloor * \delta$ and in each case at least one partial space I_j , or I_k of the
 virtual storage space is allocated to ~~these~~ the virtual data storage systems by means of a
 random process, whereby $[a]$ describes the integral part of a number $a \in \mathbb{R}$.

4. (Currently amended) ~~The M~~method according to ~~one of the aforementioned~~ Claim 1,
 characterized in that the virtual storage space is represented by the interval $[0, 1)$ and the
 partial spaces I_j by at least one partial interval contained in $[0, 1)$.
5. (Currently amended) ~~The M~~method according to ~~one of the aforementioned~~ Claim 1,
 characterized in that in the initial random process the left edge of the interval I_j is
 determined by the application of an initial hash function and the length of the interval is
 calculated in accordance with $(g(j) + s * c_j)$ ~~wherein with:~~
 c_j : equals a value of the parameter relating to the data storage system and
 s : equals a stretch factor, selected in such a way that $s * c_j < 1$ is fulfilled.
6. (Currently amended) ~~The M~~method according to ~~one of the aforementioned~~ Claim 1,
 characterized in that the stretch factor s is selected in a manner that the interval $[0, 1)$ is
 completely covered over by the partial intervals I_j .
7. (Currently amended) ~~The M~~method according to ~~one of the aforementioned~~ Claim 1,
 characterized in that in the second random process a number $h(i) \in [0, 1)$ is allocated to
 each data block D_i ($i=1, \dots, m$) by means of ~~an~~the application of a second hash function
 $h(i)$.

8. (Currently amended) ~~The m~~Method according to ~~one of the aforementioned C~~laims 1, characterized in that the presetable parameter is selected from the group consisting of:
- ~~-describes the~~a physical capacity of data storage systems, ~~or~~
 - ~~the a~~a request load of data storage systems ~~or~~and
 - correct ~~{sie}~~ deviations from the desired distribution.
9. (Currently amended) ~~The M~~Method according to ~~one of the aforementioned C~~laims 1, characterized in that ~~when in such a case that~~ the element $h(i)$ is allocated to a data block D_i is contained in multiple partial spaces I_j a uniform placement strategy is applied in order to allocate the data block D_i to one of the data storage spaces represented by the partial spaces I_j .
10. (Currently amended) ~~The M~~Method according to ~~one of the aforementioned C~~laims 1, characterized in that ~~when~~with a changes occurs in at least one of the values $C = (c_1, \dots, c_n)$ of the presetable parameter, a repeated allocation of the data blocks S_j ~~should~~ be carried out in accordance with the method ~~for randomly storing data pursuant to one of the C~~laims 1 through 9 while setting the new parameter values $C' = (c'_1, \dots, c'_n)$ as the basis.
11. (Currently amended) ~~The M~~Method according to ~~one of the aforementioned C~~laims 1, characterized in that ~~with~~ when a changes occurs in at least one of the values $C = (c_1, \dots, c_n)$ of the presetable parameter, a repeated allocation of the data blocks D_i to the data storage systems S_j is ~~only~~ carried out according to the method ~~for randomly storing data pursuant to one of the C~~laims 1 through 9 while setting the new parameter values $C' = (c'_1, \dots, c'_n)$ as the basis if a new parameter value c'_i varies from the corresponding current parameter value c_i by a presetable constant μ .
12. (Currently amended) ~~The M~~Method according to ~~one of the aforementioned C~~laims 1, characterized in that with changes in at least one of the values $C = (c_1, \dots, c_n)$ of the

presetable parameter into a new parameter value $C' = (c'_1, \dots, c'_n)$ a repeated allocation of the data blocks D_i to the data storage spaces is carried out in stages S_j according to the method ~~for randomly storing data pursuant to one of the Cclaims 1 through 9~~, whereby at each stage k intermediate parameter values $C^k = (c^k_1, \dots, c^k_n)$ with $|c_i - c^k_i| \neq |c_i - c'_i|$ ($i = 1, \dots, n$) are set as the basis.

13. (Currently amended) ~~The Mmethod~~ according to ~~one of the aforementioned Cclaims 1~~, characterized in that whenfor storing data blocks in a storage medium at least one table ~~is~~should be prepared in which the allocation between virtual address and physical address on the storage medium is stored.
14. (Currently amended) ~~The mMethod~~ according to ~~Cclaims 13~~, characterized in that multiple data blocks are summarized in an extent to which is allocated in the table a common physical address on the storage medium, whereinby the data blocks of an extent are linked with each other in the a logical address space by atthe first data block of an extent that consists of 2^λ obtaining an address in the form $x00\dots000$, whereby the lower λ bits are represented by the number zero, the last block of ~~this-the~~ extent receives anthe address $x11\dots111$, whereby the lowest λ bits are represented by means of the number one, and ~~the a~~ physical position of a data block is derived by ~~means of an~~ adding up of the table entries for the respectivesaid extent to the last λ bits of saidthe logical address of the data block.
15. (Currently amended) An Aarrangement with at least one processor that is equipped in such a manner that a method for randomly storing data on at least one of the group consisting of storage networks, ~~and/or on an intranet and/or on thean~~ Internet is executable, whereby the randomized storage of data includes the steps of the method ~~pursuant to one of the Cclaims 1 through 14~~.

16. (Currently amended) The Arrangement according to Claim 15, characterized in that the arrangement includes at least one of the items selected from the group consisting of
- ~~at least one a~~ data storage medium, ~~and/or~~
 - ~~at least one a~~ computer system that ~~accesses(es)~~ by reading and/or by writing to ~~the a~~ storage media, ~~and/or~~
 - ~~at least one a~~ controller unit switched in between ~~a the~~ computer system(s) and ~~the in between the computer system(s) and~~ the method for randomly storing data.
17. (Currently amended) The Arrangement according to Claim 16, characterized in that the data storage system includes at least on the group consisting of
- hard drive surfaces ~~and/or~~
 - intermediate storage spaces used as web caches.
18. (Currently amended) The Arrangement according to ~~one of the Claims 15 through 17~~, characterized in that the arrangement includes at least one controller unit switched in between ~~a the~~ computer system(s) and ~~the a~~ data storage system(s) for controlling ~~a the~~ method of randomly storing data.
19. (Currently amended) The Arrangement according to Claim 18, characterized in that the arrangement ~~at least~~ includes a computer system that accesses ~~the a~~ storage media via a the controller unit.
20. (Currently amended) The Arrangement according to ~~one of the Claims 15 through 19~~, characterized in that the method for randomly storing data is implemented as a hardware RAID method in ~~a the~~ controller unit.
21. (Currently amended) The Arrangement according to ~~one of the Claims 15 through 20~~, characterized in that the arrangement includes

- at least one dedicated computer system (~~SAN appliance~~) that is linked via data exchange means with storage media and computer systems ~~of the arrangement~~ for coordinating ~~the~~ storing of data and/or processor resources (~~in-band appliances~~) linked via means for data exchange with storage media and computer systems ~~of the arrangement~~ for distribution of data blocks.

22. (Currently amended) The Aarrangement according to ~~one of the Cclaims 15 through 21~~, characterized in that the arrangement includes heterogeneous storage media.

23. (Currently amended) A Ccomputer program product that includes a computer-readable storage medium on which is stored a program that enables a computer, once it has been loaded into the memory of the computer, to perform a method for randomly storing data on at least one the group consisting of data networks, and/or an intranet and/or the an Internet, whereby the randomized data storage includes ~~steps of the method pursuant to one of the Cclaims 1 through 14~~.

24. (Currently amended) A Ccomputer-readable storage medium, on which a program is stored that enables a computer, after it has been loaded into the memory of the computer, to perform a method for randomly storing data on at least one of the group consisting of storage networks, and/or on an intranet and/or on the an Internet, whereby the randomized data storage includes ~~the steps of the method pursuant to one of the Cclaims 1 through 14~~.